# CATOCTIN CREEK PARK & NATURE CENTER

## Frederick County, Maryland



## PROJECT DESCRIPTION

The Catoctin Creek Park & Nature Center opened its doors to the public in February of 2011. The facility is situated amongst 138 acres of parkland located off of Sumantown Road, near Middletown and Jefferson, Maryland. The property was purchased in 1974 through the state's Open Space Program. The county's Nature Council worked closely with staff and officials over the years, developing the vision and site plan for the property.

Nearly every aspect of the building's construction is centered on the mission of the facility: to provide the public with education about the local environment and ecosystems. These values are reflected in the facility's features, such as the vegetated green roof design, the geothermal HVAC system, and even the building's ceilings and floors.

As an educational facility, the Nature Center is equipped with classrooms, hands-on displays, live animal displays, a playground, pavilion, trails, and other amenities necessary to provide services to the public.

For more on the Center, go to <a href="http://catoctincreek.blogspot.com/">http://catoctincreek.blogspot.com/</a>.



#### **DID YOU KNOW?**

A geothermal Heating, Ventilation and Air Conditioning, or HVAC system, and Energy Recovery Units were installed at the Nature Center to provide a projected 20% or greater energy savings and provide flexibility of control for the facility's diverse occupants.

A geothermal system utilizes the sun's warmth absorbed into the ground and the ground's constant temperatures to warm water then transfer it through a series of pipes into the building.

Geothermal systems are able to cool buildings in the summer by rejecting heat to the ground.





For more information on the County's efforts in green building and sustainability, visit <a href="www.SustainableFrederickCounty.org">www.SustainableFrederickCounty.org</a> or contact the Office of Sustainability & Environmental Resources at 301-600-7414.

### **GREEN DESIGN FEATURES**

This Frederick County facility was designed for educating the public about nature and conservation; therefore green building practices were incorporated as an inherent element of the design and construction process. Some of the green features include:

- ✓ Used GrassPave2 road shoulders, a recycled material, to filter polluted automobile drips and reduce soil erosion, stormwater and non-point source pollution.
- ✓ Installed urinals that use 50% less water than a standard urinal per flush.
- The facility's linoleum tiles are made of natural materials, including linseed oil, wood flour, and limestone. The tiles are also colored with a nontoxic pigmentation.
- Carpet in the nature center has been engineered to get clean just when using water, cutting out the costs of harmful cleaning chemicals.
- ✓ The ceiling tiles contain between 34 and 52 percent recycled content, and have low VOC emissions.
- Aluminum sunshades minimize solar heat absorption and reduce glare.
- ✓ The building's HardiPlank fiber-cement siding can last at least 50 years, and is resistant to termites, fire, mold, and mildew.
- ✓ A green roof by Tremco helps manage stormwater runoff, reduces heat retention, and provides superior protection from weather.
- ✓ Wall panels are made of wood from fastgrowing, otherwise unused trees. Their foam cores prevent 90% of air leakage, provide insulation, and make the panels cheaper to produce than fiberglass insulation.

Owner	Frederick County Division of Parks & Recreation
Location	2929 Sumantown Road, Middletown, MD 21769
LEED Rating	N/A
Building Area	6,084 square feet
Park Area	138.14
Architect	Proffitt and Associates
Civil Engineering	Fox and Associates
Contractor	Building Systems Inc. (BSI)
Interior Design	Proffitt and Associates
Architectural Consultant	Proffitt and Associates
Electricity	RHL
IIT/Telephone	Provided by County
Cable Television	Comcast
Catoctin Creek Park Phase I Development:	\$3,198,580





